Department of General Administration
Engineering & Architectural Services

Facilities Engineering

(The Energy Program)

2005-07 Business Plan

EXECUTIVE SUMMARY

This six year business plan is for fiscal years 2005 through 2011. The plan will be modified as needed to reflect stakeholder needs, changes in energy markets and priorities of GA, the Legislature, and the Governor's Office.

Activity Description

Description of services as contained in the Agency Activity Inventory: Facilities Engineering Services (the Energy Program) provides energy engineering services to agencies on a fee for service basis with a primary emphasis on energy conservation. Services include Sustainable Design, review of Energy Life Cycle Cost Analysis (ELCCA) reports, Energy Saving Performance Contracting (ESPC), and Building Commissioning. (General Administration Services Account-Nonappropriated)

Facilities Engineering has a biennial budget of $2,836,000 and 10.8 FTEs

The Energy Program is managed as a self-sustaining business, relying on a fee for service model to support one-hundred percent of program costs. Four primary services are offered:

Sustainable Design services provide technical assistance to building owners (state agencies, colleges and K-12 schools) who want to design, build and operate buildings that minimize energy and water use and reduce their environmental impact.

ELCCA reports are required for construction of buildings over 25,000 square feet and for most major remodels. The report includes an engineering analysis to compare the cost effectiveness of various building energy systems. Energy Program staff review ELCCA reports for completeness and technical accuracy.

ESPC project management is a major focus of the Energy Program and includes providing energy efficiency services to state agencies, community colleges, universities, K-12 schools and local governments. Performance contracting uses third-party financing, performance and savings guarantees, and a design/build approach to implementing energy efficiency projects in public buildings.

Building Commissioning is a systematic and documented process of ensuring that the owner's operational needs are met, building systems perform efficiently, and building operators are properly trained.

Retrospective

Energy Program staff has managed projects valued at over $100 million, generating customer savings in excess of $8 million annually. To date, over $17 million has been added to public projects in the form of utility incentive grants.

GA's Energy Program was created by the legislature in 1980 to address a need to improve the energy efficiency of state facilities. The first task undertaken by this new program was to manage the energy audit of all state-owned buildings. Building audits identified the need for considerable capital investments and the outcome was passage of legislation directing GA to develop a program to facilitate private investment in state energy efficiency projects. In the new program of partnering with the private sector, Energy Savings Performance Contracting (ESPC), agencies contract with private Energy Service Companies (ESCOs) who identify, finance, install and monitor energy efficiency measures. All project costs are paid for out of reduced utility costs with the ESCO guaranteeing energy savings.

In 1996 the Energy Program was enhanced with the addition of four new staff as the result of the closure of the State Energy Office and the transfer of all public sector programs to GA, including the responsibility of administration of the Energy Life Cycle Cost Analysis (ELCCA) process.

In 2002, the Energy Program entered into a contract with Avista Utilities in Spokane that provides a financial incentive to GA for electrical efficiency measures installed in public facilities. The contract will generate approximately $666,000 in annual revenues over the ten year contract period. GA will retain $87,600 of this amount with the balance being passed on to GA's customers. Washington State University and the Community Colleges of Spokane are the primary recipients of the Avista financial incentive. Due in part to the Avista revenue Energy Program project management fees were reduced by 10%.

The Energy Program's eleven staff, with two staff in a Spokane office, includes professional mechanical and electrical engineers, energy engineers and many of whom are also Certified Energy Managers (CEM).

Prospective

Future strategies for adding value to our customers' projects will include an increased focus on sustainable design services and a continued effort to maximize the benefits ESPC in public facilities. Significant potential remains in the K-12 and local government sector and state agencies and colleges will again offer opportunities as their infrastructure ages and new technologies become available. Future strategies may also provide opportunities for the Energy Program to provide services associated with alternative and renewable energy projects, including solar, wind, geothermal, fuel cells, and co-generation. Recent global warming initiatives from the Governor's Office and the subsequent policies to reduce state government greenhouse gas emissions may also provide opportunities for the Energy Program to expand the services it provides.

Long-range plans anticipate staff will increase by an additional three FTE to meet the demand for Sustainable Building services and ESPC project management.

GA Business Plan – Template for Section II
Energy Program

Vision: **State government is a model for sustainability.**
Mission: **Provide services to reduce customer use of energy, water and natural resources.**

Sect II	05-07	07-09	09-11
Goal:	Reduce energy consumption in public facilities.	Reduce energy consumption in public facilities.	Reduce energy consumption in public facilities.
Strategies:	Install energy efficient equipment.	Install energy efficient equipment.	Install energy efficient equipment.
Objective:	Use less energy and reduce utility expenses.	Use less energy and reduce utility expenses.	Use less energy and reduce utility expenses.
Performance Measures:	Complete efficiency projects to save customers $500,000 annually.	Complete efficiency projects to save customers $500,000 annually.	Complete efficiency projects to save customers $500,000 annually.

Sect II	05-07	07-09	09-11
Goal:	Design public facilities to meet LEED Silver standards.	Design public facilities to meet LEED Silver standards.	Design public facilities to meet LEED Silver standards.
Strategies:	Demonstrate LEED standards with Eco-charrettes.	Demonstrate cost effectiveness.	Incorporate LEED as standard procedure.
Objective:	Incorporate LEED into all public projects.	Incorporate LEED into all public projects	Incorporate LEED into all public projects
Performance Measures:	Assist 5 major public works projects to meet LEED Silver standards.	Assist 10 major public works projects to meet LEED Silver standards.	Assist 10 major public works projects to meet LEED Silver standards.

In addition, **performance measures and efficiency** for the Energy Program are measured by our ability to add value for our clients. The Energy Program provides certain guarantees to its clients and failure to meet those guarantees will result in no compensation for services provided. Examples of these **performance measures** include:

1. A guarantee that project management fees we charge can be paid for out of utility savings, i.e. no increase in operating costs, or no fee is due.
2. A guarantee that building audits will identify cost-effective energy efficiency measures or there is no cost for the audit.
3. A guarantee of maximum construction costs and building system performance.
4. Project performance is measured by quantifying the customer's savings in energy units (kWh, Therms, BTUs, gallons, etc.) and in reductions in utility costs.
5. Adding value is further measured by the amount of utility rebates and grants we are able to negotiate for our clients.